

§ 280.42

40 CFR Ch. I (7–1–00 Edition)

§ 280.44(c). No release detection is required for suction piping that is designed and constructed to meet the following standards:

- (i) The below-grade piping operates at less than atmospheric pressure;
- (ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;
- (iii) Only one check valve is included in each suction line;
- (iv) The check valve is located directly below and as close as practical to the suction pump; and
- (v) A method is provided that allows compliance with paragraphs (b)(2) (ii)–(iv) of this section to be readily determined.

§ 280.42 Requirements for hazardous substance UST systems.

Owners and operators of hazardous substance UST systems must provide release detection that meets the following requirements:

(a) Release detection at existing UST systems must meet the requirements for petroleum UST systems in § 280.41. By December 22, 1998, all existing hazardous substance UST systems must meet the release detection requirements for new systems in paragraph (b) of this section.

(b) Release detection at new hazardous substance UST systems must meet the following requirements:

(1) Secondary containment systems must be designed, constructed and installed to:

- (i) Contain regulated substances released from the tank system until they are detected and removed;
- (ii) Prevent the release of regulated substances to the environment at any time during the operational life of the UST system; and
- (iii) Be checked for evidence of a release at least every 30 days.

NOTE.— The provisions of 40 CFR 265.193, Containment and Detection of Releases, may be used to comply with these requirements.

(2) Double-walled tanks must be designed, constructed, and installed to:

- (i) Contain a release from any portion of the inner tank within the outer wall; and
- (ii) Detect the failure of the inner wall.

(3) External liners (including vaults) must be designed, constructed, and installed to:

- (i) Contain 100 percent of the capacity of the largest tank within its boundary;
- (ii) Prevent the interference of precipitation or ground-water intrusion with the ability to contain or detect a release of regulated substances; and
- (iii) Surround the tank completely (i.e., it is capable of preventing lateral as well as vertical migration of regulated substances).

(4) Underground piping must be equipped with secondary containment that satisfies the requirements of paragraph (b)(1) of this section (e.g., trench liners, jacketing of double-walled pipe). In addition, underground piping that conveys regulated substances under pressure must be equipped with an automatic line leak detector in accordance with § 280.44(a).

(5) Other methods of release detection may be used if owners and operators:

(i) Demonstrate to the implementing agency that an alternate method can detect a release of the stored substance as effectively as any of the methods allowed in §§ 280.43(b) through (h) can detect a release of petroleum;

(ii) Provide information to the implementing agency on effective corrective action technologies, health risks, and chemical and physical properties of the stored substance, and the characteristics of the UST site; and,

(iii) Obtain approval from the implementing agency to use the alternate release detection method before the installation and operation of the new UST system.

§ 280.43 Methods of release detection for tanks.

Each method of release detection for tanks used to meet the requirements of § 280.41 must be conducted in accordance with the following:

(a) *Inventory control.* Product inventory control (or another test of equivalent performance) must be conducted monthly to detect a release of at least 1.0 percent of flow-through plus 130 gallons on a monthly basis in the following manner: